APPENDIX E

VERIDIAN ENVIRONMENTAL DATA VALIDATION REPORTS

E.1 THIRD QUARTER 2007 SOIL GAS VALIDATION REPORTS
E.2 FOURTH QUARTER 2007 SOIL GAS VALIDATION REPORTS
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APPENDIX E.1

THIRD QUARTER 2007 SOIL GAS VALIDATION REPORTS

October 19, 2007

Mr. Anand Helekar, PE
TRC Solutions, Inc.
21 Technology Drive
Irvine, California 92618

Dear Mr. Helekar:

Enclosed is the quality assurance review of the organic data for samples collected between June 9 and July 7, 2007, as part of the Waste Disposal, Incorporated Superfund Site in Santa Fe Springs, California. This report includes samples from sample delivery groups (SDGs) P2701715, P2701786, P2701887, P2701954, P2701964, P2701965, P2702000, and P2702033.

Overall, the data quality appears to be good based on the data reviewed. As requested, a Level III validation was performed on ten percent (10%) of the vapor monitoring well samples (**WDI-VW-29-S-6-24-07, WDI-VW-29-I-6-24-07, WDI-VW-29-D-6-24-07, WDI-VW-46-S-6-24-07, WDI-VW-46-I-6-24-07, WDI-VW-46-D-6-24-07,** and **WDI-VW-46-D-6-24-07-SC**) and for ten percent (10%) in-business air monitoring samples (**WDI-IBM-32-6-13-07** and **WDI-IBM-32-6-13-07-SC**). No data were rejected; however, portions of the data were qualified due to calibration and matrix inference issues.

If you have any questions or comments, please feel free to call me.

Sincerely,

William G. Kay, M.S.
Director of Chemistry

Enc.

QUALITY ASSURANCE REVIEW OF

THE SAMPLES COLLECTED FOR THE

WASTE DISPOSAL, INCORPORATED SUPERFUND SITE

SANTA FE SPRINGS, CALIFORNIA

SDGs

P2701715, P2701786, P2701887, P2701954, P2701964, P2701965, P2702000, and P2702033

October 19, 2007

Prepared for:

TRC Solutions, Inc.
21 Technology Drive
Irvine, CA 92618

Prepared by:

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Introduction

This quality assurance review is based upon an examination of the data generated from the analyses of vapor samples collected between June 9 and July 7, 2007, as part of the Waste Disposal, Incorporated Superfund Site in Santa Fe Springs, California. The samples included in this quality assurance review are presented in Table 1.

This review has been performed with guidance from the "National Functional Guidelines for Organic Data Review" (U.S. EPA, October 1999), the Region 9 Data Quality Indicator Tables for EPA Method TO-15 (U.S. EPA, January 1999), and the Quality Assurance Project Plan for the Waste Disposal, Inc. Superfund Site, Santa Fe Springs, California (TRC, revised September 2006).

The reported analytical results are presented on the laboratory Results of Analysis forms included in Section B, "Analytical Results." Data were examined to determine the usability of the analytical results and compliance relative to requirements specified by EPA methodology. In addition, the deliverables, which were prepared in a Contract Laboratory Program-like format, were evaluated. Qualifier codes have been manually placed next to results on the analysis reports, where necessary, so that the data user can quickly assess the qualitative and/or quantitative reliability of any result based on the criteria evaluated. Details of this QA review are presented in the narrative section of this report.

This critical QA review identifies data quality issues for specific samples and specific evaluation criteria. The data qualifications allow the data end-user to best understand the usability of the analytical results. Data that have not been qualified in this report should be considered valid based on the QC criteria that have been applied.

TABLE 1

SAMPLES INCLUDED IN THIS QUALITY ASSURANCE REVIEW

Sample Count	TRC Sample Number	Laboratory Sample Number	SDG	Date Sampled	Parameter(s) Examined
1	WDI-IBM-03-6-9-07	P2701715-001	P2701715	6/9/07	CH, TO, TO*
2	WDI-IBM-22-6-9-07	P2701715-002	P2701715	6/9/07	CH, TO, TO*
3	WDI-IBM-24B-6-9-07	P2701715-003	P2701715	6/9/07	CH, TO, TO*
4	WDI-IBM-24B-6-9-07-SC (Field Duplicate of WDI-IBM-24B-6-9-07)	P2701715-004	P2701715	6/9/07	CH, TO, TO*
5	WDI-IBM-41-6-10-07	P2701715-005	P2701715	6/10/07	CH, TO, TO*
6	WDI-IBM-50-6-10-07	P2701715-006	P2701715	6/10/07	CH, TO, TO*
7	WDI-IBM-49-6-10-07	P2701715-007	P2701715	6/10/07	CH, TO, TO*
8	WDI-IBM-24-6-10-07	P2701715-008	P2701715	6/10/07	CH, TO, TO*
9	WDI-IBM-03B-6-10-07	P2701715-009	P2701715	6/10/07	CH, TO, TO*
10	WDI-IBM-28-6-10-07	P2701715-010	P2701715	6/10/07	CH, TO, TO*
11	WDI-IBM-37-6-13-07	P2701786-001	P2701786	6/13/07	CH, TO, TO*
12	**WDI-IBM-32-6-13-07**	**P2701786-002**	**P2701786**	**6/13/07**	**CH, TO, TO***
13	**WDI-IBM-32-6-13-07-SC (Field Duplicate of WDI-IBM-32-6-13-07)**	**P2701786-003**	**P2701786**	**6/13/07**	**CH, TO, TO***
14	WDI-VW-39-S-6-23-07	P2701887-001	P2701887	6/23/07	CH, FG, TO
15	WDI-VW-39-D-6-23-07	P2701887-002	P2701887	6/23/07	CH, FG, TO
16	WDI-VW-38-S-6-23-07	P2701887-003	P2701887	6/23/07	CH, FG, TO
17	WDI-VW-38-D-6-23-07	P2701887-004	P2701887	6/23/07	CH, FG, TO
18	WDI-VW-37-S-6-23-07	P2701887-005	P2701887	6/23/07	CH, FG, TO
19	WDI-VW-37-D-6-23-07	P2701887-006	P2701887	6/23/07	CH, FG, TO
20	WDI-VW-56-S-6-23-07	P2701887-007	P2701887	6/23/07	CH, FG, TO
21	WDI-VW-56-S-6-23-07-SC (Field Duplicate of WDI-VW-56-S-6-23-07)	P2701887-008	P2701887	6/23/07	CH, FG, TO
22	WDI-VW-56-I-6-23-07	P2701887-009	P2701887	6/23/07	CH, FG, TO

TABLE 1 (Cont.)

Sample Count	TRC Sample Number	Laboratory Sample Number	SDG	Date Sampled	Parameter(s) Examined
23	WDI-VW-56-D-6-23-07	P2701887-010	P2701887	6/23/07	CH, FG, TO
24	WDI-VW-42-S-6-24-07	P2701887-011	P2701887	6/24/07	CH, FG, TO
25	WDI-VW-42-D-6-24-07	P2701887-012	P2701887	6/24/07	CH, FG, TO
26	WDI-VW-55-S-6-24-07	P2701887-013	P2701887	6/24/07	CH, FG, TO
27	WDI-VW-55-I-6-24-07	P2701887-014	P2701887	6/24/07	CH, FG, TO
28	WDI-VW-55-D-6-24-07	P2701887-015	P2701887	6/24/07	CH, FG, TO
29	WDI-VW-61-S-6-24-07	P2701887-016	P2701887	6/24/07	CH, FG, TO
30	WDI-VW-61-I-6-24-07	P2701887-017	P2701887	6/24/07	CH, FG, TO
31	WDI-VW-61-D-6-24-07	P2701887-018	P2701887	6/24/07	CH, FG, TO
32	WDI-VW-31-S-6-24-07	P2701887-019	P2701887	6/24/07	CH, FG, TO
33	**WDI-VW-46-S-6-24-07**	**P2701887-020**	**P2701887**	**6/24/07**	**CH, FG, TO**
34	**WDI-VW-46-I-6-24-07**	**P2701887-021**	**P2701887**	**6/24/07**	**CH, FG, TO**
35	**WDI-VW-46-D-6-24-07**	**P2701887-022**	**P2701887**	**6/24/07**	**CH, FG, TO**
36	**WDI-VW-46-D-6-24-07-SC (Field Duplicate of WDI-VW-46-D-6-24-07)**	**P2701887-023**	**P2701887**	**6/24/07**	**CH, FG, TO**
37	WDI-VW-31-D-6-24-07	P2701887-024	P2701887	6/24/07	CH, FG, TO
38	**WDI-VW-29-S-6-24-07**	**P2701887-025**	**P2701887**	**6/24/07**	**CH, FG, TO**
39	**WDI-VW-29-I-6-24-07**	**P2701887-026**	**P2701887**	**6/24/07**	**CH, FG, TO**
40	**WDI-VW-29-D-6-24-07**	**P2701887-027**	**P2701887**	**6/24/07**	**CH, FG, TO**
41	WDI-VW-34-S-6-27-07	P2701954-001	P2701954	6/27/07	CH, FG, TO
42	WDI-VW-34-I-6-27-07	P2701954-002	P2701954	6/27/07	CH, FG, TO
43	WDI-VW-34-D-6-27-07	P2701954-003	P2701954	6/27/07	CH, FG, TO
44	WDI-VW-36-S-6-27-07	P2701954-004	P2701954	6/27/07	CH, FG, TO
45	WDI-VW-36-S-6-27-07-SC (Field Duplicate of WDI-VW-36-S-6-27-07)	P2701954-005	P2701954	6/27/07	CH, FG, TO
46	WDI-VW-36-D-6-27-07	P2701954-006	P2701954	6/27/07	CH, FG, TO

TABLE 1 (Cont.)

Sample Count	TRC Sample Number	Laboratory Sample Number	SDG	Date Sampled	Parameter(s) Examined
47	WDI-IBM-21-6-30-07	P2701964-001	P2701964	6/30/07	CH, TO, TO*
48	WDI-IBM-21-6-30-07-SC (Field Duplicate of WDI-IBM-21-6-30-07)	P2701964-002	P2701964	6/30/07	CH, TO, TO*
49	WDI-VW-49-S-6-29-07	P2701965-001	P2701965	6/29/07	CH, FG, TO
50	WDI-VW-49-I-6-29-07	P2701965-002	P2701965	6/29/07	CH, FG, TO
51	WDI-VW-49-D-6-29-07	P2701965-003	P2701965	6/29/07	CH, FG, TO
52	WDI-VW-49-S-6-29-07-WH (Field Duplicate of WDI-VW-49-S-6-29-07)	P2701965-004	P2701965	6/29/07	CH, FG, TO
53	WDI-VW-62-S-6-30-07	P2701965-005	P2701965	6/30/07	CH, FG, TO
54	WDI-VW-62-I-6-30-07	P2701965-006	P2701965	6/30/07	CH, FG, TO
55	WDI-VW-62-D-6-30-07	P2701965-007	P2701965	6/30/07	CH, FG, TO
56	WDI-VW-25-D-6-30-07	P2701965-008	P2701965	6/30/07	CH, FG, TO
57	WDI-VW-58-S-6-30-07	P2701965-009	P2701965	6/30/07	CH, FG, TO
58	WDI-VW-58-I-6-30-07	P2701965-010	P2701965	6/30/07	CH, FG, TO
59	WDI-VW-58-D-6-30-07	P2701965-011	P2701965	6/30/07	CH, FG, TO
60	WDI-VW-35-S-6-30-07	P2701965-012	P2701965	6/30/07	CH, FG, TO
61	WDI-VW-35-D-6-30-07	P2701965-013	P2701965	6/30/07	CH, FG, TO
62	WDI-VW-35-6-30-07-AMBIENT	P2701965-014	P2701965	6/30/07	CH, FG, TO
63	WDI-VW-62-6-30-07-AMBIENT	P2701965-015	P2701965	6/30/07	CH, FG, TO
64	WDI-VW-41-S-7-2-07	P2702000-001	P2702000	7/2/07	CH, FG, TO
65	WDI-VW-41-S-7-2-07-AC (Field Duplicate of WDI-VW-41-S-7-2-07)	P2702000-002	P2702000	7/2/07	CH, FG, TO
66	WDI-VW-41-D-7-2-07	P2702000-003	P2702000	7/2/07	CH, FG, TO
67	WDI-VW-30-S-7-7-07	P2702033-001	P2702033	7/7/07	CH, FG, TO
68	WDI-VW-30-I-7-7-07	P2702033-002	P2702033	7/7/07	CH, FG, TO
69	WDI-VW-30-D-7-7-07	P2702033-003	P2702033	7/7/07	CH, FG, TO

TABLE 1 (Cont.)

Sample Count	TRC Sample Number	Laboratory Sample Number	SDG	Date Sampled	Parameter(s) Examined
70	WDI-VW-30-D-7-7-07-SC (Field Duplicate of WDI-VW-30-D-7-7-07)	P2702033-004	P2702033	7/7/07	CH, FG, TO
71	WDI-VW-51-I-7-7-07	P2702033-005	P2702033	7/7/07	CH, FG, TO
72	WDI-VW-51-S-7-7-07	P2702033-006	P2702033	7/7/07	CH, FG, TO
73	WDI-VW-51-D-7-7-07	P2702033-007	P2702033	7/7/07	CH, FG, TO
74	WDI-VW-TRIP-BLANK (Trip Blank)	P2702033-008	P2702033	7/7/07	CH, FG, TO
75	WDI-VW-TRIP-BLANK (Trip Blank)	P2702033-009	P2702033	7/7/07	CH, FG, TO
76	WDI-VW-TRIP-BLANK (Trip Blank)	P2702033-010	P2702033	7/7/07	CH, FG, TO

Notes:

CH - Methane and/or Total Gaseous Non-Methane Organics (as Methane) by U.S. EPA (EPA) Method 25C.

FG - Fixed Gases by EPA Method 3C.

TO - Volatile Organic Compounds by Method EPA TO-15.

TO* - Vinyl Chloride and 1,2-Dibromoethane by Method EPA TO-15 SIM.

Samples in **bold** were reviewed.

SECTION A

QUALITY ASSURANCE REVIEW

SECTION A QUALITY ASSURANCE REVIEW

1. Organic Data

The organic analyses of 76 air samples (including Field QC samples) were performed by Columbia Analytical Services, Inc., located in Simi Valley, California. The vapor samples were collectively analyzed for volatile organics by EPA Method TO-15, for vinyl chloride and 1,2-dibromoethane by EPA Method TO-15 SIM, for methane and total gaseous non-methane organics by EPA Method 25C, and for fixed gases by EPA Method 3C. The parameters for the analyses are specified in Table 1.

The findings offered in this report are based on a comprehensive review of the Level III deliverables for ten percent (10%) of the vapor monitoring well samples (VW) and for ten percent (10%) in-business air monitoring samples (IBM). The samples validated were **WDI-VW-29-S-6-24-07, WDI-VW-29-I-6-24-07, WDI-VW-29-D-6-24-07, WDI-VW-46-S-6-24-07, WDI-VW-46-I-6-24-07, WDI-VW-46-D-6-24-07, WDI-VW-46-D-6-24-07-SC, WDI-IBM-32-6-13-07**, and **WDI-IBM-32-6-13-07-SC**. The areas examined for the Level III review included an examination of calibrations, retention time windows and shifts, internal standard area counts, analytical sequence, and instrument sensitivity. The samples validated exhibited the following exceptions. Data usability is addressed subsequently.

Comments

1. Based on the Case Narratives, Sample Acceptance Check Forms, and Chain-of-Custody Records, the samples were received intact and in good condition by the laboratory. All sample analyses were performed in accordance with the Chain-of-Custody Records except the samples listed below.

SDG	Method	Samples
P2702000	**TO-15***	**WDI-VW-41-S-7-2-07** **WDI-VW-41-S-7-2-07-AC** **WDI-VW-41-D-7-2-07**

2. The following discrepancies were noted with the data packages:

SDG	Discrepancy
2701887	Sample WDI-VW-46-D-6-24-07-SC was identified as "WDI-VW-46-D-6-24-07" in the case narrative.

SDG	Discrepancy
P2701954	Sample WDI-VW-36-S-6-27-07-SC was identified as "WDI-VW-36-SC-6-27-07" in the case narrative.
P2702000	Sample WDI-VW-41-S-7-2-07-AC was identified as "WDI-VW-41-S-7-2-07-SC" in the case narrative. Also, the COC indicated that the samples were to be analyzed for vinyl chloride and 1,2-dibromoethane by TO-15 SIM. However, the samples were not analyzed by TO-15 SIM and the change was not documented.
P2702033	Sample WDI-VW-51-S-7-7-07 was identified as "WDI-VW-51-D-7-7-07" in the case narrative.

The laboratory has amended the laboratory reports to correct these discrepancies.

3. According to the laboratory, the following results may be biased high due to matrix interferences.

Method	SDG	Analyte	Samples with Matrix Interferences
TO-15	P2701887	Acetone	**WDI-VW-46-S-6-24-07**
TO-15	P2701887	Vinyl Acetate	**WDI-VW-29-S-6-24-07** **WDI-VW-29-I-6-24-07** **WDI-VW-29-D-6-24-07**
TO-15	P2701887	Styrene	**WDI-VW-29-I-6-24-07** **WDI-VW-29-D-6-24-07**

4. A high relative standard deviation (>30%) was noted for acetone in the Method TO-15 initial calibration listed below.

SDG	IC Date	Instrument	Analyte	Percent Difference
P2701786	06/19-20/07	MS08	Acetone	35.84%
P2701887	06/19-20/07	MS08	Acetone	35.84%

5. High percent differences (>30%) were noted for the following analytes in the Method TO-15 continuing calibrations listed below.

SDG	CCV Date (Time)	Instrument	Analyte	Percent Difference
P2701786	06/26/07 (19:51)	MS08	Acetone	30.4%

SDG	CCV Date (Time)	Instrument	Analyte	Percent Difference
P2701887	07/05/07 (21:09)	MS02	Vinyl Acetate	-37.7%

6. A low CRDL standard recovery was observed for carbon tetrachloride in the following CRDL standard.

Method	SDG	Instrument Date (Time)	Analyte
TO-15	P2701887	MS02 07/05/07 (12:43)	Carbon Tetrachloride

With regard to data usability, the areas of concern are calibration and matrix interference issues. Based upon a rigorous review of the data provided, the following organic chemistry data qualifiers are offered. It should be noted that the following data usability issues represent an interpretation of the QC results for the project samples. Quite often, data qualifications address issues relating to problems associated with the sample matrix. Similarly, the validation guidelines routinely specify areas of the data that require qualification for which the analytical methods applied do not require corrective action by the laboratory. Accordingly, the following data usability issues should not be construed as an indication of laboratory performance.

Organic Data Qualifiers

- The data for carbon tetrachloride in the samples listed below may be biased low (J/UJ), due to a low CRDL standard recovery.

Method	SDG	Instrument Date (Time)	Analyte	Sample(s) With Biased Low Results (J/UJ)
TO-15	P2701887	MS02 07/05/07 (12:43)	Carbon Tetrachloride	**WDI-VW-29-S-6-24-07** **WDI-VW-29-I-6-24-07**

- According to the laboratory, the following results may be biased high (J) due to matrix interferences.

Method	SDG	Analyte	Samples with Biased High Results (J)
TO-15	P2701887	Acetone	**WDI-VW-46-S-6-24-07**
TO-15	P2701887	Vinyl Acetate	**WDI-VW-29-S-6-24-07** **WDI-VW-29-I-6-24-07** **WDI-VW-29-D-6-24-07**

Method	SDG	Analyte	Samples with Biased High Results (J)
TO-15	P2701887	Styrene	WDI-VW-29-I-6-24-07 WDI-VW-29-D-6-24-07

- The data for the following analytes in the samples listed below are estimated (J) by the laboratory, due to high relative standard deviation observed in the associated initial calibrations.

Method	SDG	Instrument Initial Calibration Date	Analyte	Sample(s) With Estimated Positive Results (J)
TO-15	P2701786	MS08 06/19-20/07	Acetone	WDI-IBM-32-6-13-07 WDI-IBM-32-6-13-07-SC
TO-15	P2701887	MS08 06/19-20/07	Acetone	WDI-VW-46-S-6-24-07 WDI-VW-46-I-6-24-07 WDI-VW-46-D-6-24-07 WDI-VW-46-D-6-24-07-SC WDI-VW-29-D-6-24-07

- The data for the following analyte in the samples listed below may be higher than reported (UJ/J) by the laboratory, due to high percent differences coupled with decreases in instrument sensitivity in the following continuing calibration standards.

Method	SDG	Instrument Continuing Calibration Date (Time)	Analyte	Sample(s) With Estimated Positive Results (J)
TO-15	P2701786	MS08 06/26/07 (19:51)	Acetone	WDI-IBM-32-6-13-07 WDI-IBM-32-6-13-07-SC

- The data for the following analyte in the samples listed below may be lower than reported (J) by the laboratory, due to high percent differences coupled with increases in instrument sensitivity in the following continuing calibration standards.

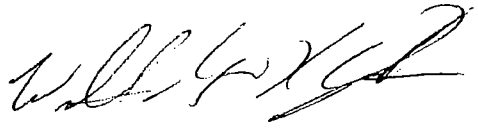
Method	SDG	Instrument Continuing Calibration Date (Time)	Analyte	Sample(s) With Estimated Positive Results (J)
TO-15	P2701887	MS02 07/05/07 (21:09)	Vinyl Acetate	WDI-VW-29-S-6-24-07 WDI-VW-29-I-6-24-07

- Two field duplicate pairs (**WDI-IBM-32-6-13-07/WDI-IBM-32-6-13-07-SC** and **WDI-VW-46-D-6-24-07/WDI-VW-46-D-6-24-07-SC**) were reviewed. Acceptable precision and sample representativeness was demonstrated by all reported results in the field duplicate pairs except for carbon disulfide in samples **WDI-VW-46-D-6-24-07** (4.1 $\mu g/m^3$)/**WDI-VW-46-D-6-24-07-SC** (ND 1.8 $\mu g/m^3$).

2. Conclusions

Based on this QA review, several organic results required qualification due to calibration and matrix inference issues. To confidently use any of the analytical data within this sample set, the data user should understand the qualifications and limitations of the results. The data validation support documentation, laboratory case narratives, and project chain-of-custody records are provided in Section C. Project correspondence is provided in Section D.

Report prepared and approved by:



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(530) 758-1903

Date: October 19, 2007

ORGANIC DATA QUALIFIERS

J Quantitation is approximate due to limitations identified during the quality assurance review (data validation).

UJ This compound was not detected, but the quantitation limit is probably higher due to a low bias identified during the quality assurance review.

APPENDIX E.2

FOURTH QUARTER 2007 SOIL GAS VALIDATION REPORTS

April 30, 2008

Mr. Anand Helekar, PE
TRC Solutions, Inc.
21 Technology Drive
Irvine, California 92618

Dear Mr. Helekar:

Enclosed is the quality assurance review of the organic data for samples collected between December 20, 2007 and January 25, 2008, as part of the Waste Disposal, Incorporated Superfund Site in Santa Fe Springs, California. This report includes samples from sample delivery groups (SDGs) P2703838, P2703874, P2800010, P2800069, P2800081, P2800087, P2800183, P2800207, and P2800208.

Overall, the data quality appears to be good based on the data reviewed. As requested, a Level III validation was performed on ten percent (10%) of the vapor monitoring well samples (**WDI-VW-31S-12-27-07**, **WDI-VW-31D-12-27-07**, **WDI-VW-30S-12-27-07**, **WDI-VW-30I-12-27-07**, **WDI-VW-30D-12-27-07**, **WDI-VW-29S-12-27-07,** and **WDI-VW-29I-12-27-07**) and for ten percent (10%) in-business air monitoring samples (**WDI-IBM-21-1-24-08**, **WDI-IBM-21-1-24-08DUP**, and **WDI-IBM-24B-1-24-08**). No data were rejected; however, portions of the data were qualified due to calibration, laboratory control sample, CRQL standard, and matrix inference issues.

If you have any questions or comments, please feel free to call me.

Sincerely,

William G. Kay, M.S.
Director of Chemistry

Enc.

QUALITY ASSURANCE REVIEW OF

THE SAMPLES COLLECTED FOR THE

WASTE DISPOSAL INCORPORATED SUPERFUND SITE

SANTA FE SPRINGS, CALIFORNIA

SDGs

P2703838, P2703874, P2800010, P2800069, P2800081, P2800183, P2800207, and P2800208

April 30, 2008

Prepared for:

TRC Solutions, Inc.
21 Technology Drive
Irvine, CA 92618

Prepared by:

VERIDIAN ENVIRONMENTAL, INC.
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Suite 2
Davis, CA 95616

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2. SDG P2703874
3. SDG P2800010
   (Data included for completeness only; no samples were reviewed in this SDG)
4. SDG P2800069
   (Data included for completeness only; no samples were reviewed in this SDG.)
5. SDG P2800081
   (Data included for completeness only; no samples were reviewed in this SDG.)
6. SDG P2800087
   (Data included for completeness only; no samples werereviewed in this SDG.)
7. SDG P2800183
   (Data included for completeness only; no samples were reviewed in this SDG.)
8. SDG P2800207
9. SDG P2800208
   (Data included for completeness only; no samples were reviewed in this SDG.)

Section C **Data Validation Support Documentation, Laboratory Case Narratives, and Project Chain-of-Custody Records**

1. SDG P2703838
   (Data included for completeness only; no samples were reviewed in this SDG.)

2. SDG P2703874

3. SDG P2800010
   (Data included for completeness only; no samples were reviewed in this SDG.)

4. SDG P2800069
   (Data included for completeness only; no samples were reviewed in this SDG.)

5. SDG P2800081
   (Data included for completeness only; no samples were reviewed in this SDG.)

6. SDG P2800087
   (Data included for completeness only; no samples were reviewed in this SDG.)

7. SDG P2800183
   (Data included for completeness only; no samples were reviewed in this SDG.)

8. SDG P2800207

9. SDG P2800208
   (Data included for completeness only; no samples were reviewed in this SDG.)

Section D **Project Correspondence**

Introduction

This quality assurance review is based upon an examination of the data generated from the analyses of vapor samples collected between December 20, 2007 and January 25, 2008, as part of the Waste Disposal Incorporated Superfund Site in Santa Fe Springs, California. The samples included in this quality assurance review are presented on Table 1.

This review has been performed with guidance from the "National Functional Guidelines for Organic Data Review" (U.S. EPA, October 1999), the Region 9 Data Quality Indicator Tables for EPA Method TO-15 (U.S. EPA, January 1999), and the Quality Assurance Project Plan for the Waste Disposal, Inc. Superfund Site, Santa Fe Springs, California (TRC, revised September 2006).

The reported analytical results are presented on the laboratory Results of Analysis forms included in Section B, "Analytical Results." Data were examined to determine the usability of the analytical results and compliance relative to requirements specified by EPA methodology. In addition, the deliverables, which were prepared in a Contract Laboratory Program-like format, were evaluated. Qualifier codes have been manually placed next to results on the analysis reports, where necessary, so that the data user can quickly assess the qualitative and/or quantitative reliability of any result based on the criteria evaluated. Details of this QA review are presented in the narrative section of this report.

This critical QA review identifies data quality issues for specific samples and specific evaluation criteria. The data qualifications allow the data end-user to best understand the usability of the analytical results. Data that have not been qualified in this report should be considered valid based on the QC criteria that have been applied.

TABLE 1

SAMPLES INCLUDED IN THIS QUALITY ASSURANCE REVIEW

	TRC Sample Identification	Laboratory Sample Number	SDG	Date Sampled	Parameter(s) Examined
In-Business Monitoring Samples					
1	WDI-IBM-41-1-11-08	P2800087-001	P2800087	01/11/08	CH, FG, TO, TO*
2	WDI-IBM-49-1-11-08	P2800087-002	P2800087	01/11/08	CH, FG, TO, TO*
3	WDI-IBM-03-1-11-08	P2800087-003	P2800087	01/11/08	CH, FG, TO, TO*
4	WDI-IBM-03-1-11-08DPL (Field Duplicate of WDI-IBM-03-1-11-08)	P2800087-004	P2800087	01/11/08	CH, FG, TO, TO*
5	WDI-IBM-24AMB-1-12-08	P2800087-005	P2800087	01/12/08	CH, FG, TO, TO*
6	WDI-IBM-50-1-12-08	P2800087-006	P2800087	01/12/08	CH, FG, TO, TO*
7	WDI-IBM-32-1-12-08	P2800087-007	P2800087	01/12/08	CH, FG, TO, TO*
8	WDI-IBM-28-1-12-08	P2800087-008	P2800087	01/12/08	CH, FG, TO, TO*
9	WDI-IBM-28DPL-1-12-08 (Field Duplicate of WDI-IBM-28-1-12-08)	P2800087-009	P2800087	01/12/08	CH, FG, TO, TO*
10	WDI-IBM-22-1-18-08	P2800183-001	P2800183	01/18-01/19/08	CH, TO*
11	WDI-IBM-22-1-18-08DUP (Field Duplicate of WDI-IBM-23-1-18-08)	P2800183-002	P2800183	01/18-01/19/08	CH, TO*
12	WDI-IBM-03B-1-19-08	P2800183-003	P2800183	01/19-01/20/08	CH, TO*
13	WDI-IBM-03B-1-19-08DUP (Field Duplicate of WDI-IBM-03B-1-19-08)	P2800183-004	P2800183	01/19-01/20/08	CH, TO*
14	**WDI-IBM-21-1-24-08**	**P2800207-001**	**P2800207**	**01/24/08**	**CH, TO***
15	**WDI-IBM-21-1-24-08DUP (Field Duplicate of WDI-IBM-21-1-24-08)**	**P2800207-002**	**P2800207**	**01/24/08**	**CH, TO***
16	**WDI-IBM-24B-1-24-08**	**P2800207-003**	**P2800207**	**01/24/08**	**CH, TO***

TABLE 1 (Cont.)

	TRC Sample Identification	Laboratory Sample Number	SDG	Date Sampled	Parameter(s) Examined
Vapor Well Samples					
1	WDI-VW-39S-12-20-07	P2703838-001	P2703838	12/20/07	CH, FG, TO
2	WDI-VW-39D-12-20-07	P2703838-002	P2703838	12/20/07	CH, FG, TO
3	WDI-VW-38S-12-20-07	P2703838-003	P2703838	12/20/07	CH, FG, TO
4	WDI-VW-38D-12-20-07	P2703838-004	P2703838	12/20/07	CH, FG, TO
5	WDI-VW-37S-12-20-07	P2703838-005	P2703838	12/20/07	CH, FG, TO
6	WDI-VW-37D-12-20-07	P2703838-006	P2703838	12/20/07	CH, FG, TO
7	WDI-VW-37SDPL-12-20-07 (Field Duplicate of WDI-VW-37S-12-20-07)	P2703838-007	P2703838	12/20/07	CH, FG, TO
8	WDI-VW-36S-12-21-07	P2703838-008	P2703838	12/21/07	CH, FG, TO
9	WDI-VW-36D-12-21-07	P2703838-009	P2703838	12/21/07	CH, FG, TO
10	WDI-VW-35S-12-21-07	P2703838-010	P2703838	12/21/07	CH, FG, TO
11	WDI-VW-35D-12-21-07	P2703838-011	P2703838	12/21/07	CH, FG, TO
12	WDI-VW-34S-12-21-07	P2703838-012	P2703838	12/21/07	CH, FG, TO
13	WDI-VW-34I-12-21-07	P2703838-013	P2703838	12/21/07	CH, FG, TO
14	WDI-VW-34D-12-21-07	P2703838-014	P2703838	12/21/07	CH, FG, TO
15	WDI-VW-34IDPL-12-21-07 (Field Duplicate of WDI-VW-34I-12-21-07)	P2703838-015	P2703838	12/21/07	CH, FG, TO
16	**WDI-VW-31S-12-27-07**	**P2703874-001**	**P2703874**	**12/27/07**	**CH, FG, TO**
17	**WDI-VW-31D-12-27-07**	**P2703874-002**	**P2703874**	**12/27/07**	**CH, FG, TO**
18	**WDI-VW-30S-12-27-07**	**P2703874-003**	**P2703874**	**12/27/07**	**CH, FG, TO**
19	**WDI-VW-30I-12-27-07**	**P2703874-004**	**P2703874**	**12/27/07**	**CH, FG, TO**
20	**WDI-VW-30D-12-27-07**	**P2703874-005**	**P2703874**	**12/27/07**	**CH, FG, TO**
21	**WDI-VW-29S-12-27-07**	**P2703874-006**	**P2703874**	**12/27/07**	**CH, FG, TO**
22	**WDI-VW-29I-12-27-07**	**P2703874-007**	**P2703874**	**12/27/07**	**CH, FG, TO**
23	WDI-VW-29D-12-27-07	P2703874-008	P2703874	12/27/07	CH, FG, TO
24	WDI-VW-42S-12-27-07	P2703874-009	P2703874	12/27/07	CH, FG, TO

TABLE 1 (Cont.)

	TRC Sample Identification	Laboratory Sample Number	SDG	Date Sampled	Parameter(s) Examined
25	WDI-VW-42D-12-27-07	P2703874-010	P2703874	12/27/07	CH, FG, TO
26	WDI-VW-42DDPL-12-27-07 (Field Duplicate of WDI-VW-42D-12-27-07)	P2703874-011	P2703874	12/27/07	CH, FG, TO
27	WDI-VW-25D-12-27-07	P2703874-012	P2703874	12/27/07	CH, FG, TO
28	WDI-VW-46S-1-02-08	P2800010-001	P2800010	01/02/08	CH, FG, TO
29	WDI-VW-46-I-1-02-08	P2800010-002	P2800010	01/02/08	CH, FG, TO
30	WDI-VW-46-D-1-02-08	P2800010-003	P2800010	01/02/08	CH, FG, TO
31	WDI-VW-61-S-1-02-08	P2800010-004	P2800010	01/02/08	CH, FG, TO
32	WDI-VW-61-I-1-02-08	P2800010-005	P2800010	01/02/08	CH, FG, TO
33	WDI-VW-61-D-1-02-08	P2800010-006	P2800010	01/02/08	CH, FG, TO
34	WDI-VW-51-S-1-02-08	P2800010-007	P2800010	01/02/08	CH, FG, TO
35	WDI-VW-51-I-1-02-08	P2800010-008	P2800010	01/02/08	CH, FG, TO
36	WDI-VW-51-D-1-02-08	P2800010-009	P2800010	01/02/08	CH, FG, TO
37	WDI-VW-41-S-1-02-08	P2800010-010	P2800010	01/02/08	CH, FG, TO
38	WDI-VW-41-D-1-02-08	P2800010-011	P2800010	01/02/08	CH, FG, TO
39	WDI-VW-41-S-DUP-1-02-08 (Field Duplicate of WDI-VW-41-S-1-02-08)	P2800010-012	P2800010	01/02/08	CH, FG, TO
40	WDI-VW-62-S-1-07-08	P2800069-001	P2800069	01/07/08	CH, FG, TO
41	WDI-VW-62-I-1-07-08	P2800069-002	P2800069	01/07/08	CH, FG, TO
42	WDI-VW-62-D-1-07-08	P2800069-003	P2800069	01/07/08	CH, FG, TO
43	WDI-VW-49-S-1-07-08	P2800069-004	P2800069	01/07/08	CH, FG, TO
44	WDI-VW-49-I-1-07-08	P2800069-005	P2800069	01/07/08	CH, FG, TO
45	WDI-VW-49-D-1-07-08	P2800069-006	P2800069	01/07/08	CH, FG, TO
46	WDI-VW-58-S-1-07-08	P2800069-007	P2800069	01/07/08	CH, FG, TO
47	WDI-VW-58-I-1-07-08	P2800069-008	P2800069	01/07/08	CH, FG, TO
48	WDI-VW-58-D-1-07-08	P2800069-009	P2800069	01/07/08	CH, FG, TO

TABLE 1 (Cont.)

	TRC Sample Identification	Laboratory Sample Number	SDG	Date Sampled	Parameter(s) Examined
49	WDI-VW-58-S-DUP-1-07-08 (Field Duplicate of WDI-VW-58-S-1-07-08)	P2800069-010	P2800069	01/07/08	CH, FG, TO
50	WDI-VW-55-S-1-08-08	P2800069-011	P2800069	01/08/08	CH, FG, TO
51	WDI-VW-55-I-1-08-08	P2800069-012	P2800069	01/08/08	CH, FG, TO
52	WDI-VW-55-D-1-08-08	P2800069-013	P2800069	01/08/08	CH, FG, TO
53	WDI-VW-56-S-1-08-08	P2800069-014	P2800069	01/08/08	CH, FG, TO
54	WDI-VW-56-I-1-08-08	P2800069-015	P2800069	01/08/08	CH, FG, TO
55	WDI-VW-56-D-1-08-08	P2800069-016	P2800069	01/08/08	CH, FG, TO
56	WDI-VW-56-SDPL-1-08-08 (Field Duplicate of WDI-VW-56-S-1-08-08)	P2800069-017	P2800069	01/08/08	CH, FG, TO
57	TRIP BLANK -1-08-08	P2800069-018	P2800069	01/08/08	CH, FG, TO
58	WDI-VW-62-AMBIENT-1-10-08	P2800081-001	P2800081	01/10/08	CH, FG, TO
59	WDI-VW-42-AMBIENT-1-10-08	P2800081-002	P2800081	01/10/08	CH, FG, TO
60	WDI-VW-TRIP BLANK-2-1-25-08	P2800208-001	P2800208	01/25/08	CH, FG, TO
61	WDI-VW-TRIP BLANK-3-1-25-08	P2800208-002	P2800208	01/25/08	CH, FG, TO

Notes:

CH - Methane and/or Total Gaseous Non-Methane Organics (as Methane) by U.S. EPA (EPA) Method 25C Modified.

FG - Fixed Gases by EPA Method 3C Modified.

TO - Volatile Organic Compounds by EPA Method TO-15 Modified.

TO* - Vinyl Chloride and 1,2-Dibromoethane by EPA Method TO-15 SIM.

Samples in **bold** were reviewed.

SECTION A

QUALITY ASSURANCE REVIEW

SECTION A QUALITY ASSURANCE REVIEW

1. Organic Data

The organic analyses of 77 air samples (including Field QC samples) were performed by Columbia Analytical Services, Inc., located in Simi Valley, California. The vapor samples were collectively analyzed for volatile organics by EPA Method TO-15 Modified, for vinyl chloride and 1,2-dibromoethane by EPA Method TO-15 SIM, for methane and total gaseous non-methane organics by EPA Method 25C Modified, and for fixed gases by EPA Method 3C Modified. The parameters for the analyses are specified in Table 1.

The findings offered in this report are based on a comprehensive review of the Level III deliverables for ten percent (10%) of the vapor monitoring well samples (VW) and the associated field QC samples and for ten percent (10%) of the in-business air monitoring samples (IBM) and the associated field QC samples. The samples validated were **WDI-VW-31S-12-27-07, WDI-VW-31D-12-27-07, WDI-VW-30S-12-27-07, WDI-VW-30I-12-27-07, WDI-VW-30D-12-27-07, WDI-VW-29S-12-27-07, WDI-VW-29I-12-27-07, WDI-IBM-21-1-24-08, WDI-IBM-21-1-24-08DUP,** and **WDI-IBM-24B-1-24-08**. The areas examined for the Level III review included an examination of calibrations; retention time windows and shifts; internal standard area counts; analytical sequence; and instrument sensitivity. Those samples validated exhibited the following exceptions. Data usability is addressed subsequently.

Comments

1. Based on the Case Narratives, Sample Acceptance Check Forms, and Chain-of-Custody Records, custody seals were not present on either the shipping containers or the sample bottles for all validated samples.

2. According to the laboratory, the following results may be biased high due to matrix interferences.

Method	SDG	Analyte	Samples with Biased Results
TO-15	P2800207	Acetone	**WDI-IBM-21-1-24-08**
TO-15	P2800207	Acetone	**WDI-IBM-21-1-24-08DUP**
TO-15	P2800207	Acetone	**WDI-IBM-24B-1-24-08**
TO-15	P2703874	Acetone	**WDI-VW-31D**
TO-15	P2703874	Acetone	**WDI-VW-30S**

3. A slightly high percent recovery (90-110%) was observed for methane (EPA 25C) in the following laboratory control sample.

Method	SDG	Date of LCS	Analyte	Percent Recovery
EPA 25C	P2800207	01/28/08	Methane	110.10%

4. High percent differences (>30%) were observed for the compounds in the following continuing calibration standards.

Method	SDG	Instrument Date (Time)	Analyte	Percent Difference
TO-15	P2703874	MS08 01/02/08 (20:24)	Chloromethane	31.6%
			Vinyl Chloride	30.7%
TO-15	P2703874	MS08 01/03/08 (20:42)	Chloromethane	33.6%
			Vinyl Chloride	32.3%
			Carbon Disulfide	30.7%
TO-15	P2800207	MS09 01/29/08 (15:32)	Vinyl Acetate	-31.5%

5. High percent differences (>30%) were observed for the compounds in the following CRQL standards.

Method	SDG	Instrument Date (Time)	Analyte	Percent Difference
TO-15	P2703874	MS08 01/02/08 (11:31)	Acetone	-49.8%
TO-15	P2703874	MS08 01/03/08 (11:40)	Acetone	-42.3%

With regard to data usability, the areas of concern are matrix interference, laboratory control sample recoveries, continuing calibrations, and CRQL standard recoveries. Based upon a rigorous review of the data provided, the following organic chemistry data qualifiers are offered. It should be noted that the following data usability issues represent an interpretation of the QC results for the project samples. Quite often, data qualifications address issues relating to problems associated with the sample matrix. Similarly, the validation guidelines routinely specify areas of the data that require qualification for which the analytical methods applied do not require corrective action by the laboratory. Accordingly, the following data usability issues should not be construed as an indication of laboratory performance.

Organic Data Qualifiers

- According to the laboratory, the following results may be biased high due to matrix interferences.

Method	SDG	Analyte	Sample(s) With Biased High Results (J)
TO-15	P2800207	Acetone	WDI-IBM-21-1-24-08 WDI-IBM-21-1-24-08DUP WDI-IBM-24B-1-24-08
TO-15	P2703874	Acetone	WDI-VW-31D WDI-VW-30S

- The data as reported by the laboratory for methane in the samples listed below may be biased slightly high (J), due to a high percent recovery in the associated laboratory control sample.

Method	SDG	Date of LCS	Analyte	Sample(s) With Estimated Results (J)
EPA 25C	P2800207	01/28/08	Methane	WDI-IBM-21-1-24-08 WDI-IBM-21-1-24-08 DUP WDI-IBM-24B-1-24-08

- The data as reported by the laboratory for the following analytes in the samples listed below may be biased low (UJ), due to high percent differences coupled with decreases in instrument sensitivity in the following continuing calibration standards.

Method	SDG	Instrument Date (Time)	Analyte	Sample(s) With Biased Low Results (UJ)
TO-15	P2703874	MS08 01/02/08 (20:24)	Chloromethane Vinyl Chloride	WDI-VW-31S WDI-VW-31D WDI-VW-30S WDI-VW-30I WDI-VW-30D
TO-15	P2703874	MS08 01/03/08 (20:42)	Chloromethane Vinyl Chloride	WDI-VW-30S WDI-VW-29S WDI-VW-29I
TO-15	P2703874	MS08 01/03/08 (20:42)	Carbon Disulfide	WDI-VW-29S WDI-VW-29I

- The data for acetone in the samples listed below may be biased high (J), due to a high CRQL standard recovery.

Method	SDG	Instrument Date (Time)	Analyte	Sample(s) With Biased High Results (J)
TO-15	P2703874	MS08 01/02/08 (11:31)	Acetone	**WDI-VW-31D WDI-VW-30S WDI-VW-30I WDI-VW-30D**
TO-15	P2703874	MS08 01/03/08 (11:40)	Acetone	**WDI-VW-30S WDI-VW-29S**

2. *Conclusions*

Based on this QA review, several organic results required qualification due to matrix interference, laboratory control sample recoveries, calibrations, and CRQL standard recoveries. To confidently use any of the analytical data within this sample set, the data user should understand the qualifications and limitations of the results. The data validation support documentation, laboratory case narratives, and project chain-of-custody records are provided in Section C. Project correspondence is provided in Section D.

Report prepared by:

Tracy A. Young
Quality Assurance Chemist

Report reviewed and approved by:

William G. Kay
Director of Chemistry

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1111 Kennedy Place
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(530) 758-1903

Date: April 30, 2008

ORGANIC DATA QUALIFIERS

UJ Detection limit may be biased low due to limitations identified during the quality assurance review (data validation).

J Quantitation is approximate due to limitations identified during the quality assurance review (data validation).

APPENDIX E.3

THIRD QUARTER 2007 GROUND WATER VALIDATION REPORTS

October 19, 2007

Mr. Anand Helekar, PE
TRC Solutions, Inc.
21 Technology Drive
Irvine, California 92618

Dear Mr. Helekar:

Enclosed is the quality assurance review of the data for aqueous samples collected between June 26 and August 18, 2007, as part of the Waste Disposal Incorporated Superfund Site in Santa Fe Springs, California. This report includes samples from Test America Report Numbers IQF2489, IQF2627, and IQH1783.

Overall, the data quality appears to be good. Per your request, ten percent (10%) of the thirty (30) samples submitted and analyzed were validated. The three samples validated were **WDI-GMW-01-27**, **WDI-GMW-11-27**, and **WDI-GMW-26-27**. Although a portion of the data was qualified, no data were rejected.

If you have any questions or comments, please feel free to call me.

Sincerely,

William G. Kay, M.S.
Director of Chemistry

Enc.

QUALITY ASSURANCE REVIEW OF

THE SAMPLES COLLECTED FOR THE

WASTE DISPOSAL INCORPORATED SUPERFUND SITE

SANTA FE SPRINGS, CALIFORNIA

Laboratory Report Numbers
IQF2489, IQF2627, and IQH1783

October 19, 2007

Prepared for:

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Prepared by:

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1. Analytical Data
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1. Laboratory Report IQF2489
2. Laboratory Report IQF2627
   (Data included for completeness only; no samples were reviewed from this Laboratory Report.)
3. Laboratory Report IQH1783
   (Data included for completeness only; no samples were reviewed from this Laboratory Report.)

Section C **Data Validation Support Documentation, Laboratory Case Narratives, and Project Chain-of-Custody Records**

1. Laboratory Report IQF2489
2. Laboratory Report IQF2627
   (Data included for completeness only; no samples were reviewed from this Laboratory Report.)
3. Laboratory Report IQH1783
   (Data included for completeness only; no samples were reviewed from this Laboratory Report.)

Introduction

This quality assurance review is based upon an examination of the data generated from the analyses of aqueous samples collected between June 26 and August 18, 2007, as part of the Waste Disposal Incorporated Superfund Site in Santa Fe Springs, California. The samples included in this quality assurance review are presented in Table 1.

This review has been performed with guidance from the "National Functional Guidelines for Organic Data Review" (U.S. EPA, October 1999); "National Functional Guidelines for Inorganic Data Review" (U.S. EPA, October 2004); the Region 9 Data Quality Indicator Tables for EPA Methods 160.1 (U.S. EPA, November 1999), 200.7 (U.S. EPA, March 2001), 245.1 (U.S. EPA, March 2001), 300.0 (U.S. EPA, August 1993), 8260 (U.S. EPA, December 1999), and 9040 (U.S. EPA, January 2000); and the Quality Assurance Project Plan for the Waste Disposal, Inc. Superfund Site, Santa Fe Springs, California (TRC, revised September 2006).

The reported analytical results are presented on the laboratory Results of Analysis forms included in Section B, "Analytical Results." Data were examined to determine the usability of the analytical results and compliance relative to requirements specified by EPA methodology. In addition, the deliverables, which were prepared in a Contract Laboratory Program-like format, were evaluated. Qualifier codes have been manually placed next to results on the analysis reports, where necessary, so that the data user can quickly assess the qualitative and/or quantitative reliability of any result based on the criteria evaluated. Details of this QA review are presented in the narrative section of this report.

This critical QA review identifies data quality issues for specific samples and specific evaluation criteria. The data qualifications allow the data end-user to best understand the usability of the analytical results. Data that have not been qualified in this report should be considered valid based on the QC criteria that have been applied.

TABLE 1

SAMPLES INCLUDED IN THIS QUALITY ASSURANCE REVIEW

Sample Count	TRC Sample Identification	Laboratory Sample Number	Laboratory Report	Date Sampled	Parameter(s) Examined
1	**WDI-GMW-01-27**	**IQF2489-01**	**IQF2489**	**6/27/2007**	**V, M, GC**
2	WDI-GMW-10-27	IQF2489-02	IQF2489	6/27/2007	V, M, GC
3	**WDI-GMW-11-27**	**IQF2489-03**	**IQF2489**	**6/27/2007**	**V, M, GC**
4	WDI-GMW-21-27	IQF2489-04	IQF2489	6/27/2007	V, M, GC
5	**WDI-GMW-26-27**	**IQF2489-05**	**IQF2489**	**6/27/2007**	**V, M, GC**
6	WDI-GMW-FD-11-27 (Field Duplicate)	IQF2489-06	IQF2489	6/27/2007	V, M, GC
7	WDI-GWM-TB-27 (Trip Blank)	IQF2489-07	IQF2489	6/27/2007	V
8	WDI-GWM-FR-27 (Field Rinsate)	IQF2489-08	IQF2489	6/27/2007	V, M, GC
9	WDI-GMW-FB-27 (Field Blank)	IQF2489-09	IQF2489	6/27/2007	V, M, GC
10	WDI-GMW-23-26	IQF2489-10	IQF2489	6/26/2007	V, GC
11	WDI-GMW-22-26	IQF2489-11	IQF2489	6/26/2007	V, GC
12	WDI-GMW-32-26	IQF2489-12	IQF2489	6/26/2007	V, GC
13	WDI-GMW-TB-26 (Trip Blank)	IQF2489-13	IQF2489	6/26/2007	V
14	WDI-GWM-FR-26 (Field Rinsate)	IQF2489-14	IQF2489	6/26/2007	V, GC
15	WDI-GWM-FB-26 (Field Blank)	IQF2489-15	IQF2489	6/26/2007	V, GC
16	WDI-GMW-30-28	IQF2627-01	IQF2627	6/28/2007	V, M, GC
17	WDI-GMW-FD-30-28 (Field Duplicate)	IQF2627-02	IQF2627	6/28/2007	V, M, GC
18	WDI-GMW-29-28	IQF2627-03	IQF2627	6/28/2007	V, M, GC
19	WDI-GMW-33-28	IQF2627-04	IQF2627	6/28/2007	V, M, GC
20	WDI-GMW-02-28	IQF2627-05	IQF2627	6/28/2007	V, M, GC
21	WDI-GMW-32-28	IQF2627-06	IQF2627	6/28/2007	M
22	WDI-GMW-23-28	IQF2627-07	IQF2627	6/28/2007	M

TABLE 1 (Cont.)

Sample Count	TRC Sample Identification	Laboratory Sample Number	Laboratory Report	Date Sampled	Parameter(s) Examined
23	WDI-GMW-22-28	IQF2627-08	IQF2627	6/28/2007	M
24	WDI-GMW-TB-28 (Trip Blank)	IQF2627-09	IQF2627	6/28/2007	V
25	WDI-GMW-FR-28 (Field Rinsate)	IQF2627-10	IQF2627	6/28/2007	V, M, GC
26	WDI-GMW-FB-28 (Field Blank)	IQF2627-11	IQF2627	6/28/2007	V, M, GC
27	WDI-GMW-22-18	IQH1783-01	IQH1783	8/18/2007	V
28	WDI-GMW-23-18	IQH1783-02	IQH1783	8/18/2007	V
29	WDI-GMW-TB-18 (Trip Blank)	IQH1783-03	IQH1783	8/18/2007	V
30	WDI-GMW-FB-18 (Field Blank)	IQH1783-04	IQH1783	8/18/2007	V

Notes:

V - Volatile Organics by U.S. EPA (EPA) Method 8260B.

M - Metals (Al, As, Ba, Be, Ca, Cd, Cr, Co, Fe, Hg, Mg, Mn, Na, Ni, Pb, Sb, Se, Tl, V, Zn) by EPA Methods 6010B/7470A.

GC - Chloride and Sulfate by EPA Method 300.0, Total Dissolved Solids by EPA Method 160.1, and for pH by Standards Methods Method SM4500-H,B.

Samples in **bold** were reviewed.

SECTION A QUALITY ASSURANCE REVIEW

1. Analytical Data

The organic analyses of 30 aqueous samples (including Field QC samples) were performed by Test America, located in Irvine, California. The aqueous samples were collectively analyzed for volatile organics by EPA Method 8260B, for metals by EPA Methods 6010B/7470A, for chloride and sulfate by EPA Method 300.0, for Total Dissolved Solids by EPA Method 160.1, and for pH by Standards Methods SM4500-H,B. The parameters for the analyses are specified in Table 1.

The findings offered in this report are based on a comprehensive review of the Level II deliverables for samples **WDI-GMW-01-27**, **WDI-GMW-11-27**, and **WDI-GMW-26-27**.

Organic Data

The areas examined included Field QC data (blanks and duplicates), sample preservation, holding times, surrogate recoveries, laboratory batch QC data (blank, precision, and spike results), and any additional laboratory data qualifiers. The samples validated exhibited the following exceptions. Data usability is addressed subsequently.

Comment

- Based on the Case Narratives and Chain-of-Custody Records, the samples were received intact by the laboratory. The temperature (7°C) of the samples upon laboratory receipt did not meet the project-specified requirement of 4 ± 2°C. Since the samples were below 10°C, qualification of the data was not warranted.

With regard to data usability, the data for samples **WDI-GMW-01-27**, **WDI-GMW-11-27**, and **WDI-GMW-26-27** are acceptable without qualification.

Inorganic Data

The areas examined included Field QC data (blanks and duplicates), sample preservation, holding times, and laboratory batch QC data (blank, precision, and spike results). The samples validated exhibited the following exceptions. Data usability is addressed subsequently.

Comments

1. Based on the Case Narratives and Chain-of-Custody Records, the samples were received intact by the laboratory. The temperature (7°C) of the samples upon laboratory receipt did

not meet the project-specified requirement of 4 ± 2°C. Since the samples were below 10°C, qualification of the data was not warranted.

2. The pH analyses for samples **WDI-GMW-01-27**, **WDI-GMW-11-27**, and **WDI-GMW-26-27** were performed by the laboratory within one day of sample receipt and 36 hours of sample collection.

3. The source concentrations of calcium, magnesium, and sodium exceeded four-times (4X) the spike level in the matrix spike/matrix spike duplicate analysis of sample **WDI-GWM-01-27**. Consequently, an assessment of matrix effects cannot be made for these analytes. Acceptable recoveries and relative percent differences were reported for all other analytes.

4. The laboratory duplicate analysis for Total Dissolved Solids (TDS) was performed on a non-project sample. Consequently, an assessment of precision cannot be made for TDS

5. The analytes listed below were reported in the associated field blanks. Since calcium, chloride, magnesium, sodium, sulfate and total dissolved solids were reported in samples **WDI-GMW-01-27**, **WDI-GMW-11-27**, and **WDI-GMW-26-27** at concentrations greater than five-times (5X) the blank level, qualification of the data was not warranted. However, the reported result for mercury in sample **WDI-GMW-26-27** warranted qualification.

Blank ID	Analyte	Concentration
WDI-GMW-FR-27	Calcium	4.4 mg/L
	Magnesium	0.16 mg/L
	Sodium	0.65 mg/L
	Chloride	1.1 mg/L
	Sulfate	1.0 mg/L
	Total Dissolved Solids	19 mg/L
WDI-GMW-FB-27	Mercury	0.0010 mg/L

With regard to data usability, the data for sample mercury in sample **WDI-GMW-26-27** should be considered anomalous and has been qualified as not detected (U). All other data for these samples are acceptable without qualification.

2. *Conclusions*

Based on this QA review, the data for samples **WDI-GMW-01-27, WDI-GMW-11-27,** and **WDI-GMW-26-27** are acceptable with qualification. To confidently use any of the analytical data within this sample set, the data user should understand the qualifications and limitations of the results. The data validation support documentation, laboratory case narratives, and project chain-of-custody records are provided in Section C.

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INORGANIC DATA QUALIFIERS

U This compound should be considered "not detected" since it was detected in a blank at a similar level.